

FRONTIER ELK GAME FARM APPLICATION FINAL ENVIRONMENTAL ASSESSMENT

MONTANA ENVIRONMENTAL POLICY ACT (MEPA) PROCESS

Montana Fish, Wildlife & Parks (FWP) is required to perform an environmental analysis in accordance with MEPA for "each proposal for projects, programs, legislation, and other major actions of state government significantly affecting the quality of the human environment" [Administrative Rules of Montana (ARM) 12.2.430]. FWP prepares environmental assessments (EA) to determine whether a project would have a significant effect on the environment. If FWP determines that a project will have a significant impact that cannot be mitigated to a minor impact, the agency will prepare a more detailed environmental impact statement (EIS) before making a decision. If the agency determines that a proposed project will not have a significant impact, or that the impact can be mitigated to minor or none, the agency may make its licensing decision based upon the results of the EA and criteria established under Montana game farm statute Montana Code Annotated (MCA) Title 87, Chapter 4, Part 4.

Mitigation measures may be considered in FWP's analysis as a means to reduce impact(s) of a game farm to a level below significance. FWP may also recommend mitigation measures to reduce impacts that are considered minor.

FWP prepared a Draft EA for the proposed Frontier Elk Game Farm which identified no significant impacts from the Proposed Action that could not be mitigated. The Draft EA was released for public review and comment January 12, 1999. The card describing the project and availability of the draft EA was sent to adjoining landowners and other interested individuals and organizations. A copy of the draft EA was sent to the Environmental Quality Council, Dept. Of Environmental Quality; Montana Historical Society, Montana State Library, Dept. of Livestock, Flathead County Library, Flathead Regional Development Office, Flathead County Commissioners, and the state representative and senator for that area. Comments were accepted through February 3, 1999.

The Draft EA and this Final EA are hereby approved as the Final EA. This Final EA for the proposed development of the Frontier Elk Game Farm contains a summary of the Proposed Action, a description of the affected environment, and potential consequences of the Proposed Action, all of which are described in additional detail in the Draft EA, which is adopted in this Final EA. This document also describes mitigation measures, includes public comments, and provides the conclusion of the EA. The preferred alternative is the Proposed Action with several recommended mitigation measures.

PROPOSED GAME FARM APPLICATION

FWP received a completed application from Mike Janicki on September 25, 1998 to construct the proposed Frontier Elk Game Farm at a site located approximately 4 miles east of Kalispell, Flathead County, Montana. As proposed, a maximum of 70 elk would be raised on the 35-acre site, which includes a 32-acre pasture and a 3-acre handling facility. The game farm would use existing quarantine facilities located at Grant Spoklie's game farm located nearby on White Basin Road, Kalispell, Montana. Elk initially released into the proposed game farm would come from a local licensed game farm. The game farm would also board elk owned by Grant Spoklie's game farm.

The applicant's residence adjoins the proposed game farm site, which is currently used for grain production. The purpose of the proposed game farm is to provide breeding stock, meat and antler production. There would be no fee shooting by the public at the game farm. The applicant would use the game farm to breed, sell, and dispose of domestic elk in accordance with Montana game farm and disease control requirements stipulated in Montana statutes and administrative rules.

Fence construction would be in accordance with requirements of FWP under ARM 12.6.1533. Perimeter fencing of the 32-acre pasture would consist of 8-foot high, 6-inch mesh, high tensile big game fencing supported by 11-foot long, 2^{3/8}-inch steel pipe set 3 feet into the soil and spaced at 20-foot intervals. Corner posts would be 2^{7/8}-inch steel pipe set 3 feet into the soil and would be braced. Gates would be 8 feet high and consist of 2-inch metal tubing frame with 6-inch mesh fencing. The handling facility would be constructed with 8-foot high wood fencing and gates. All gates at the game farm would be double latching with a single lock, and would have a maximum 3-inches of ground clearance. The only exterior gate at the game farm would be located at the northeast corner of the handling facility.

ALTERNATIVES

One alternative (No Action Alternative) is evaluated in this EA. Under the No Action Alternative, FWP would not issue a license for the Frontier Elk Game Farm as proposed. Therefore, no game farm animals would be placed on the proposed game farm area. Implementation of the No Action Alternative would not preclude other activities allowed under local, state and federal laws to take place at the game farm site.

AFFECTED ENVIRONMENT

The proposed game farm site is situated in the Flathead River Valley at an elevation of about 2,960 feet. The site consists of a nearly level terrace and bottomland approximately 2 miles north of the main channel of the Flathead River. This land will be seeded to alfalfa and pasture grasses for grazing by the domestic elk. A moderate, northwest facing slope that has not been cultivated separates the terrace from the bottomland.

The owner's residence adjoins the north side of the proposed game farm. Adjoining properties are privately owned and are used for residences, crop production, and grazing. Approximately 10 residences are located within a 1-mile radius of the site and the nearest neighbor is located approximately ¼-mile east of the site.

The Soil Conservation Service identified four soil mapping units at the site. Most of the area (about 75%) is mapped as Creston Soils. The slope between the terrace and the bottomland (about 10%) is mapped as Blanchard very fine sandy loam. A similar size area on the terrace is mapped as Somers silt loam. The remaining acreage is mapped as Kalispell loam.

The Creston series consist of deep, dark, silty soils on parent materials deposited by glacial streams. Creston soils are well drained and are highly calcareous in the subsurface horizon. Soils of the Blanchard series soils are shallow to moderately deep, sandy, and calcareous in the subsurface horizon. Blanchard soils formed on the slope between the terrace and bottomland. There is a high hazard of wind and water erosion of the Blanchard soils unless they are protected. Somers silt loams are one of the most productive soils in the Upper Flathead Valley. These soils formed on terraces of glacial lakes and streams and are mildly alkaline. Kalispell series soils are deep, well drained soils, formed on outwash fans and glacial lake and stream terraces. Abundant free carbonates are present in the subsurface horizons and subsoil.

The site is located approximately ½-mile north of Egan Slough in the Flathead River valley bottom. Another small unnamed slough adjoins the north side of the proposed game farm site and flows west approximately 2 miles to a small pond. Surface water runoff from the site has potential to flow north to the unnamed slough

and south toward Egan Slough. The game farm site is not located within the floodplain boundary of the Flathead River.

A 360-foot deep well located at the site would supply water for the game farm and adjoining residence. Approximately 17 water supply wells are located within a 1-mile radius of the site. Total depths of the wells range from 176 to 417 feet. Most of the wells appear to be artesian, with static water levels ranging from 10 to 70 feet below grade.

The proposed game farm occupies a site that is primarily under cultivation of small grains. All but approximately 3 acres has been plowed. The unplowed acreage has little native vegetation, and is primarily Kentucky bluegrass, wild oats, annual forbs, and a small amount of noxious weeds (spotted knapweed and Canada thistle). Existing native species include needle-and-thread, Missouri goldenrod, and yarrow. Additionally, small conifers have been planted in the portion of the pasture closest to the house. There do not appear to be any sensitive vegetation species within the proposed game farm.

The proposed action would graze up to 70 elk on 32 acres of dryland alfalfa/pasture grass mix. The pasture would probably not be ready for grazing until the fall of the second year after planting. Estimated production would supply 70 elk with from 1 to 3 months forage, depending on species planted, and the amount and timing of precipitation. As a result, the elk would require supplemental feed.

The proposed game farm site does not include any wetlands, but is located near the Egan Slough to the south and a smaller slough to the north. These sloughs provide habitat to a variety of wetland dependent wildlife species such as dabbling ducks, Canada geese, and muskrats. A few white-tailed deer inhabit this area but the lack of vegetative cover in this area reduces the habitat suitability for deer. However, one set of deer tracks was observed on the proposed game farm site. Bottomlands along the Flathead River, 2 miles to the south, provide significant wildlife habitat in this area. The river bottomlands also provide a travel corridor for transient wildlife that would typically remain in forested mountain habitats. Elk, moose, mountain lions, black bears, gray wolves, and grizzly bears could potentially be transient through this area. The latter two species are federally-listed as threatened. Bald eagles are common year-long residents along the Flathead River, and there are an estimated four eagle nests in this area. The peregrine falcon is potentially migratory through this area. Both the bald eagle and peregrine falcon are federally-listed as threatened and endangered, respectively.

CONSEQUENCES OF THE PROPOSED ACTION

Impacts to Soil Resources and Vegetation

The proposed game farm is expected to have only minor impacts to land and soil resources. The primary impact would be associated with potential wind and water erosion on the slope between the terrace and bottomland. This situation would occur if the stocking rate causes bare ground to be exposed for an extended period of time.

Forage production under a grazing system would probably be less than if the land was used for hay production. Plant vigor would decrease more rapidly under continuous grazing, and may result in decreased forage production, reduced ground cover, increased soil erosion and invasion by noxious weeds.

The potential to introduce new and/or expand existing populations of noxious weeds is present. Forage requirements of the elk would have to be satisfied with hay. Importation of hay may result in the introduction of noxious weeds. Importation of elk from other producers may also result in a seed source for noxious weeds.

Impacts to Water Resources

Raising elk at the 35-acre site is likely to have a minor affect on water resources. Slightly increased runoff and erosion could result from ground disturbances by the domestic elk, particularly if the stocking density reaches 70 elk. However, a vegetated buffer zone approximately 100 feet wide separates the game farm pasture from a small slough north of the site.

Domestic elk fecal matter and nutrient-enriched water could have a minor effect the quality of groundwater and surface water in the vicinity of the site, particularly during snowmelt or major precipitation events. Wells are located on adjoining properties, but are generally several hundred feet deep. Stocking the site with elk on a year-round basis would likely have a similar affect to using the site as horse or cattle pasture.

Impacts to Wildlife Resources

The proposed game farm site is not located within any critical big game winter range, nor is it located along a migration corridor. Activity at the proposed game farm site would not influence bald eagle nesting behavior in this area. The proposed game farm does not include any water body or wetland area and is not likely to impact aquatic resources.

There is a possibility that wild deer may enter the enclosure especially during periods of drifted snow or deep snow accumulation in the winter. Deer have also been documented to crawl under game proof fencing at sites dug by coyotes. Wild elk do pass through this area on occasion and may be attracted to the game farm, especially during the rut.

Potentially, mountain lions, black bears, grizzly bears, and wolves could pass through this area on rare occasions. The proposed game farm is situated more than a mile from the Flathead River bottomlands and the probability of large carnivores encountering the game farm is low. The enclosure of 35 acres with 8-foot high big game fencing may slightly alter the daily movement of the few white-tailed deer living in this area. The proposed game farm is sufficiently small to allow deer easy access around the enclosure. The broad open nearly level topography in this area will also contribute to deer moving freely through this area.

There is a potential of game farm elk carrying or becoming infected with a contagious wildlife disease or parasite such as tuberculosis or chronic wasting disease and then coming in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk or other wildlife. It is also possible diseases and parasites carried by wild elk could be introduced to game farm elk. Ingress of wild elk or deer could result in the destruction of the trespassing animal(s), if discovered.

Cumulative Effects

The Proposed Action would result in potential impacts that are individually minor, but not cumulatively considerable. Cumulative effects from past, present, and reasonably foreseeable activities in all resource areas would be similar to those described for the Proposed Action.

RECOMMENDED MITIGATION MEASURES

The following mitigation measures address minor impacts identified in the EA that are likely to result from the Proposed Action.

- Maintain a reasonable stocking rate within the game farm enclosure to maximize vegetative cover and minimize runoff, erosion, and potential changes in soil structure. A "reasonable stocking rate" is defined under *EA Definitions*, in Part II of the Draft EA.

- Properly dispose of excess fecal matter and dead animals. Carcasses and other wastes should not be disposed of in or adjacent to water bodies, roads, and ditches.
- Control surface water discharges from the game farm site, if they occur, by employing Best Management Practices (BMPs) where runoff could exit the pasture and enter the nearby sloughs. The BMPs may include earthen berms, vegetative buffer zones, straw bale dikes, or silt fences.
- Provide supplemental feed to the elk year-round to reduce the probability of overgrazing in the enclosure and to provide for the nutritional requirements of elk.
- Establish a rest/rotation grazing system within the proposed game farm.
- Feed only certified weed seed-free-hay and grain.
- Develop a weed control plan in conjunction with the Flathead County Weed Control District.
- Store hay, feed, and salt away from exterior fences, or in buildings.
- Feed game farm animals at the interior of the enclosure and not along the perimeter fence.
- Inspect the exterior game farm fence on a regular basis and immediately after events likely to damage the fence to insure its integrity with respect to trees, burrowing animals, predators and other game animals.
- Remove snow on either side the of the enclosure fence as required to prevent ingress and egress.
- Adjust fence requirements to include double fencing, electrification, or increased height, if fence integrity or ingress/egress becomes a problem.
- Stock a minimal number of bulls to minimize bugling during the mating season.
- Limit noisy construction activities to daylight hours and complete work as quickly as possible.
- Mitigate impacts to cultural resources by stopping work in the area of any observed archeological artifact. Report discovery of historical objects to the State Historic Preservation Office in Helena.

SUMMARY OF PUBLIC COMMENTS AND FWP RESPONSES

Public comments for the Frontier Elk Game Farm Draft EA were accepted from January 12 through February 3, 1999. FWP received one public comment letter and one phone call during that time. Substantive comments and questions are reproduced (paraphrased) below with DoL and FWP responses. Public comments are considered substantive if they relate to inadequacies or inaccuracies in the analysis or methodologies used in the Draft EA, or identify new impacts or recommend reasonable new alternatives or mitigation measures; or involve disagreements or interpretations of impact significance. Comments which express personal preferences or opinions on the proposal rather than on the evaluation itself are included but are not specifically addressed.

Written Letters #1 and #2 Issue 1:

Concern about transmission of diseases to wild game, particularly Chronic Wasting Disease (CWD).

DoL Response: The potential transmission of disease from captive game farm animals to wildlife is considered low because the disease incidence (tuberculosis, brucellosis and CWD) at this time is zero. The routine testing required by the DoL ensures that the animals on game farms are free from tuberculosis and brucellosis. TB and brucellosis testing is required for every game farm animal that is sold or transported in Montana. The source of animals for the Frontier Elk game farm is a local game farm. These animals must be tested for TB and brucellosis prior to shipment to the Frontier Elk game farm. This testing will be done by an alternative livestock veterinarian who will also perform a health examination on the animals prior to shipment.

There have been no cases of CWD in Montana wildlife or game farm animals. The information on CWD is limited. The incubation period for CWD is unknown and the route of transmission is unknown. One must have a disease present before any transmission can occur. The DoL has drafted additional administrative rules to implement mandatory CWD surveillance in Montana game farm Cervidae and has increased importation restrictions on Cervidae. The proposed rules are available for public comment and the Board of Livestock will consider final adoption of the rules in March 1999. These additional measures will further mitigate the potential for disease transmission from game farm Cervidae to wildlife. However, one must recognize that CWD is endemic in wild Cervidae in Colorado and Wyoming. Should CWD be diagnosed in Montana wildlife, the state veterinarian would take additional measures to prevent the transmission of the disease from wildlife to the game farm Cervidae.

Written Letter #1 Issue 2:

The possibility for disease transmission between game farms becomes significant under the proposal to use the quarantine facility located at a separate game farm.

DoL Response: Quarantine facilities are designed to isolate a group of animals from contact with other animals, livestock and wildlife. Animals confined in a quarantine facility by order of the DoL cannot be commingled with any other animals. Quarantine facilities are most often used for the confinement of imported animals until the animals can be tagged and marked and tested a second time for brucellosis. The quarantine period imposed on imported animals also gives the licensee and his veterinarian a period of time to observe the animals and acclimate them to their new surroundings. The state veterinarian has the ability to require additional site-specific measures be taken should a quarantinable disease be identified on a game farm. In this instance, the state veterinarian would not allow the movement of the animals from the property. Other properties on which the quarantined animal(s) has resided would be included in the epidemiological study conducted by the state veterinarian. Such properties may also be placed under a quarantine or hold order.

Written Letter #1 Issue 3:

Boarding elk from a separate game farm increases the difficulty of tracking any potentially infected animal and the risk of disease transmission.

DoL Response: See response to issue # 2 above. The DoL has a computerized system with the ability to track the movement of every game farm animal in Montana and also can track the disease test status of every game farm animal in Montana.

Written Letter # 2 Issue 4:

MEPA requires that cumulative effects be addressed; therefore we believe an Environmental Impact Statement is needed.

FWP Response: FWP considered the cumulative effects of this proposed game farm in the Draft EA by affected resource area (e.g. water, vegetation, wildlife etc.). Under the cumulative effects analysis, the past, present, and reasonably foreseeable actions were considered. Additional impacts to Risk/Health from past, present, or reasonably foreseeable activities near the proposed game farm

were not anticipated. The impact of individual game farms on FWP's and DoL's ability to license and monitor game farms has not yet been undertaken.

Verbal Comment Issue 5:

The proposed stocking rate of up to 70 elk on the 35-acre site is too high.

Response to Verbal Comment Issue #5:

The applicant proposes to operate the game farm in compliance with Montana FWP and DoL regulations. No potentially significant impacts were identified in the EA process with respect to the proposed stocking rate. Recommended mitigation measures include providing supplemental feed to the elk year-round to reduce the probability of overgrazing in the enclosure and to provide for the nutritional requirements of elk. If vegetative cover in the game farm area is significantly reduced, the Montana Dept. of Environmental Quality (DEQ) could require that the game farm obtain a "concentrated animal feeding operation" (CAFO) permit, which establishes requirements to contain certain runoff events that may occur at the site.

CONCLUSION OF THE EA

MEPA and game farm statutes require FWP to conduct an environmental analysis for game farm licensing as described in the Introduction of this Summary. FWP prepares EAs to determine whether a project would have a significant effect on the environment. If FWP determines that a project would have a significant impact that could not be mitigated to less than significant, the FWP would prepare a more detailed EIS before making a decision.

Based on the criteria evaluated in this EA, an EIS would not be required for the Frontier Elk Game Farm. The appropriate level of analysis for the Proposed Action is a mitigated EA because all impacts of the Proposed Action have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none.

The stipulation included in the Draft EA regarding the reporting of ingress and egress immediately to FWP has been eliminated because it is now included as a requirement in game farm rules that were recently revised and adopted [see ARM 12.6.1538(2)].

ANALYSIS OF IMPACT ON PRIVATE PROPERTY

Montana game farm statutes (87-4-476, MCA) require that game farm licenses may be denied or issued with stipulations to prevent unacceptable threat of escape of captive game farm animals, and to prevent a significant threat to the safety of the general public and surrounding landowners and by the shooting of game farm animals. MEPA requires FWP to identify and analyze environmental impacts of the Proposed Action and potential mitigation measures. MEPA, as revised by Senate Bill 231 of 1995, also requires agencies to evaluate the impact on private property of regulatory actions, such as denial of a permit or establishment of permit conditions (75-1-201, MCA). The Environmental Quality Council (EQC) has established procedural guidelines to implement these requirements. The analysis provided in the Draft EA was prepared in accordance with implementation guidance issued by the EQC.

In addition, the Private Property Assessment Act (2-10-101, MCA, *et seq.*) requires agencies to determine whether proposed actions by the State of Montana have "taking or damaging implications", such as to constitute a deprivation of private property in violation of the United States or Montana constitutions and, if so, to perform an impact assessment to determine the likelihood that a state or federal court would hold that the action is a taking or damaging, to review alternatives, and to determine the estimated cost of compensation. In accordance with the Act, the attorney general has prepared guidelines, including a checklist, to assist agencies in identifying and evaluating actions with taking or damaging implications.

The Draft EA contains FWP's completed checklist with respect to the required stipulations and mitigations, and has found that the preferred alternative does not have taking or damaging implications and that an impact assessment is not required.

PERSONS RESPONSIBLE FOR PREPARING THE EA AND RESPONSES TO COMMENTS

Montana Fish, Wildlife & Parks

Brian Sommers, Region 1 Game Warden
490 N. Meridian Road
Kalispell, Montana 59901
(406) 751-4562

Gael Bissel, FWP Region 1 Wildlife Biologist
490 North Meridian Road
Kalispell, Montana 59901
(406) 752-5501

Karen Zackheim, FWP Game Farm Coordinator
Enforcement Division
1420 E. Sixth Avenue
Helena, MT 59620
(406) 444-2535

Maxim Technologies, Inc.

Daphne Digrindakis, Project Manager
Chris Cronin, Environmental Scientist
Mike Cormier, Soil Scientist
James Colegrove, GIS and Graphics
Doug Rogness, Hydrologist
PO Box 4699
Helena, MT 59604

FaunaWest Wildlife Consultant

Craig Knowles, Wildlife Biologist

Other

Candace Durran, Vegetation Specialist